How Websites Work

A simple guide for carers, families, and anyone curious about the web.

Websites are part of our everyday life — we use them for shopping, learning, news, and staying connected. But have you ever wondered how they actually work? This guide explains the basics in simple terms.

1. What is a Website?

A website is a collection of pages you can visit using the internet. Each page contains information, such as text, pictures, and videos. These pages are stored on a special computer called a ‘server’.

When you use your phone, tablet or computer to visit a website, your device connects to that server and asks to see a page. The server then sends it back, and your screen displays it in your browser (like Chrome, Safari, or Edge).

2. What Happens When You Visit a Website

Here’s what happens when you type a web address (like www.example.com) and press Enter:

- Your device checks where the website is stored by asking something called a DNS server (like a phonebook for websites).
- The DNS tells your device the correct address of the web server (a string of numbers called an IP address).
- Your device connects to that server and requests the page you want to see.
- The server sends back the files that make up the page (text, images, and layout instructions).
- Your browser puts everything together and shows you the page on screen.

3. The Building Blocks of a Web Page

Every web page is made up of three main ingredients:

- HTML – decides what appears on the page (headings, paragraphs, buttons).
- CSS – adds colour, layout, and style.
- JavaScript – makes things move or react (like dropdown menus or forms).

4. Web Addresses and Domains

A web address (also called a URL) tells your browser exactly where to go. For example:

https://www.example.com/about

- ‘https’ – this means the connection is secure and private.
- ‘www.example.com’ – this is the domain name (the website’s address).
- ‘/about’ – this is the specific page or section you’re visiting.

5. What Makes a Website Safe

When a website starts with ‘https’, the ‘s’ stands for ‘secure’. It means information like passwords or messages are encrypted (scrambled) so nobody else can read them. Always look for the little padlock symbol in your browser’s address bar.

6. Cookies and Privacy

Websites often use small files called cookies to remember your preferences, such as your login details or shopping basket. Most cookies are harmless, but good websites will always tell you how they use them and ask your permission.

7. Why Some Websites are Slow

Sometimes websites take a while to load because they have lots of large images, videos, or advertisements. A strong internet connection helps, but good websites also compress their images and keep things simple so everyone can use them quickly.

8. Accessibility: Websites for Everyone

A good website should be easy for everyone to use — including people with visual or physical impairments. This means using readable fonts, good colour contrast, clear headings, and descriptions for images so screen readers can understand them.

9. Who Builds and Maintains Websites

Websites are usually created by web designers and developers. They use tools and code to design, write, and test each page. Once a site is live, it needs regular updates to stay secure, fix errors, and add new content.

10. Summary: The Journey of a Web Page

1. You type a web address and press Enter.

2. Your browser finds the website’s location.

3. The server sends the web page files back to you.

4. Your browser puts them together and shows you the page.

This all happens in less than a second!

11. Why This Matters

Understanding how websites work helps you stay safe, avoid scams, and feel more confident online. Whether you’re learning something new, connecting with family, or managing care-related tools, the web is a gateway — and knowing how it works makes it less mysterious.